

Multi-generational challenges and mental health of LGBTQ+ older adults in Slovenia

Wielopokoleniowe wyzwania i zdrowie psychiczne osób starszych LGBTQ+ w Słowenii

Mihael Nedeljko^{1,A-F,H-I} , Barbara Toplak Perović^{1,D,I,K} , Miran Grah^{2,D-E,H-I} ,
Boris Miha Kaučič^{3,1,A,E,G-H,K-L} 

¹Research Institute of Social Gerontology, Alma Mater Europaea University, Slovenia

²Department of International Economics and Business, University of Maribor, Faculty of Economics and Business, Slovenia

³Institute for Training, Work and Care dr. Marijan Borštnar Dronava, Slovenia

CORRESPONDING AUTHOR:

Boris Miha Kaučič

Institute for Training, Work and Care dr. Marijan Borštnar Dronava, Slovenia

Dornava 128, 2252, Dornava, Slovenia

e-mail: miha.kaucic@zavod-dornava.si

A – Development of the concept and methodology of the study/Opracowanie koncepcji i metodologii badań; B – Query - a review and analysis of the literature/Kwerenda – przegląd i analiza literatury przedmiotu; C – Submission of the application to the appropriate Bioethics Committee/Złożenie wniosku do właściwej Komisji Biotycznej; D – Collection of research material/Gromadzenie materiału badawczego; E – Analysis of the research material/Analiza materiału badawczego; F – Preparation of draft version of manuscript/Przygotowanie roboczej wersji artykułu; G – Critical analysis of manuscript draft version/Analiza krytyczna roboczej wersji artykułu; H – Statistical analysis of the research material/Analiza statystyczna materiału badawczego; I – Interpretation of the performed statistical analysis/Interpretacja dokonanej analizy statystycznej; K – Technical preparation of manuscript in accordance with the journal regulations/Opracowanie techniczne artykułu zgodnie z regulaminem czasopisma; L – Supervision of the research and preparation of the manuscript/Nadzór nad przebiegiem badań i przygotowaniem artykułu

STRESZCZENIE

WIELOPOKOLENIOWE WYZWANIA I ZDROWIE PSYCHICZNE OSÓB STARSZYCH LGBTQ+ W SŁOWENII

Cel pracy. Celem badania było ustalenie, czy istnieją różnice w zdrowiu psychicznym między młodszymi i starszymi pokoleniami starszych osób LGBTQ+.

Materiał i metody. Zastosowano podejście ilościowe. Kwestionariusz został wypełniony przez 318 starszych osób LGBTQ+ (50+) ze Słowenii, które spełniły kryteria włączenia i zostały wybrane przy użyciu nielosowego doboru próby. Do analizy statystycznej wykorzystano eksploracyjną analizę czynnikową (EFA) oraz test U Manna-Whitneya w celu porównania dwóch niezależnych grup.

Wyniki. W badaniu otrzymaliśmy 318 w pełni wypełnionych kwestionariuszy. Analiza EFA wyodrębniła jeden czynnik. Wyniki pokazują statystycznie istotne różnice w zdrowiu psychicznym między młodszymi i starszymi pokoleniami starszych osób LGBTQ+ w przypadku dwóch pozycji: często doświadczam stresu i stałem się bardziej odporny na skutek stawiania czoła wielu nierównościom społecznym. Młodsze pokolenie osób starszych LGBTQ+ częściej deklaruje doświadczanie stresu, ale jednocześnie wyraża poczucie odporności psychicznej.

Wnioski. Pomimo stresu, osoby starsze LGBTQ+ - zwłaszcza młodsze pokolenie - rozwinęły odporność pozwalającą sprostać wyzwaniom i poprawić zdrowie psychiczne. Uwzględnienie specyficznych potrzeb osób starszych LGBTQ+ i poprawa ich zdrowia psychicznego wymaga wyeliminowania uprzedzeń i dyskryminacji oraz uwzględnienia złożoności tożsamości i doświadczeń tych osób.

Słowa kluczowe:

odporność, dyskryminacja, stres mniejszościowy, zdrowie psychiczne, osoby starsze LGBTQ+

ABSTRACT

MULTI-GENERATIONAL CHALLENGES AND MENTAL HEALTH OF LGBTQ+ OLDER ADULTS IN SLOVENIA

Aim. The purpose of the study was to determine whether differences in mental health exist among younger and older generations of LGBTQ+ older adults.

Material and methods. A quantitative approach was taken. The questionnaire was completed by 318 LGBTQ+ older adults (50+) from Slovenia who met the inclusion criteria and were selected using a non-random purposive sample. For statistical analysis, we used exploratory factor analysis (EFA) and the Mann-Whitney U test to compare the two independent groups.

Results. We received 318 fully completed questionnaires in the survey. EFA extracted one factor. The results demonstrate statistically significant differences in mental health between younger and older generations of LGBTQ+ older adults for two items: I often experience stress and I have become more resilient due to facing many inequalities in society. The younger generation of LGBTQ+ older adults is more likely to report experiencing stress, but at the same time expresses a sense of resilience.

Conclusions. Despite the stress, LGBTQ+ older adults – especially the younger generation – have developed resilience to overcome challenges and improve mental health. Addressing the specific needs of LGBTQ+ older adults and improving their mental health requires elimination of prejudice and discrimination, and taking into account the complexity of their identities and experiences.

Key words:

resilience, discrimination, minority stress, mental health, LGBTQ+ older adults

INTRODUCTION

A societal challenge that we are already facing in Slovenia and in other developed countries of the European Union is the care of older adults, the proportion of whom is increasing [1]. The number of LGBTQ+ older adults is also increasing in proportion to the general population. The acronym LGBTQ+ includes lesbian, gay, bisexual, transgender and queer people, and others who do not identify as heterosexual and/or cisgender people [2]. We do not have statistical data on the proportion of LGBTQ+ older adults in Slovenia, and we also notice a lack of research regarding this population in our country. It is a poorly researched area that does not receive sufficient attention.

Many LGBTQ+ older adults experience victimisation throughout their lives because of their sexual orientation, gender identity or gender expression [3], and struggle with various forms of ageism-related discrimination and homo-, bi- or transphobia [4]. Discrimination is the most prominent predictor of poor health among LGBTQ+ older adults [5]. LGBTQ+ older adults may belong to more than one marginalised group at the same time and experience discrimination on multiple levels, which is called intersectional discrimination [6]. It is precisely the challenges faced by this population during life, such as (intersectional) discrimination, stigma and the prejudice of the majority population, that have a significant impact on their mental health [7], and the impact of the mentioned stressors can be particularly pronounced in later life when social networks can decrease and individuals can face greater loneliness and isolation [8]. The cumulative effect of long-term exposure to minority stress among LGBTQ+ older adults contributes to mental health disparities, as reflected in more frequent experiences of feelings of anxiety and depression [9], and as much as a third of this population needs drug therapy [10]. LGBTQ+ older adults are generally considered to have more physical illnesses and psychosocial risks (stress, violence, maltreatment, etc.) compared to the general population [11].

There is a dearth of statistical data on LGBTQ+ older adults in Slovenia, which limits our understanding of the diversity of sexual orientations and gender identities within this population [12]. However, one recent study on LGBTQ+ older adults in Slovenia found that life satisfaction increased with the size of the place of residence [13]. Jerala et al. [14] identified systemic barriers in Slovenia, such as societal stigma and limited LGBTQ+ education among GPs, hindering LGBTQ+ individuals' access to healthcare which can also affect mental health.

Despite the challenges faced by the study population, LGBTQ+ older adults have often developed resilience [15]. Understanding the mental health of LGBTQ+ older adults is critical to developing appropriate programmes and services to provide them with the support they need. This research contributes to filling the gap in knowledge regarding the mental health of this vulnerable population group and encourages action to improve their quality of life.

Differences in mental health between younger and older generations of LGBTQ+ individuals are often attributed to varying levels of societal stigma and access to support, which have evolved over time [16]. The primary objective of this research was to investigate the existence of mental health disparities between younger and older generations of LGBTQ+ older adults. The second objective was to develop a new scale for assessing mental health among LGBTQ+ older adults in Slovenia. To address these aims, the following hypothesis were formulated:

H1: There are significant differences in mental health scores between younger and older generations of LGBTQ+ older adults in Slovenia.

H2: The new scale will identify specific mental health challenges unique to LGBTQ+ older adults.

MATERIALS AND METHODS

Measuring instrument

To obtain quantitative data, we used a structured measuring instrument – a survey questionnaire. The measurement instrument of mental health among LGBTQ+ older adults used in the empirical study was developed in three phases. In the first phase, we conducted a literature review. In the second phase, we conducted eleven in-depth individual interviews with LGBTQ+ older adults. After qualitative content analysis of the data, we developed items for the measurement scale. We adapted the item I try to maintain good mental functioning as I age from the Successful Aging Scale [17] questionnaire related to mental health. Respondents indicated their (dis)agreement on a 7-point Likert scale, in which 1 means strongly disagree; 2 – disagree; 3 – somewhat disagree; 4 – neither agree nor disagree; 5 – somewhat agree; 6 – agree; 7 – strongly agree. The content validity of the questionnaire was established through a review by five experts with academic backgrounds in LGBTQ+ studies. Cronbach's alpha coefficient was used to assess the internal consistency of the questionnaire.

Sample

A non-random purposive sample included 318 persons who met the following inclusion criteria: age 50 years or older, self-identification as an LGBTQ+ person, all genders and gender identities, verbal communication and reading literacy, and the ability to provide informed consent to participate in research. Exclusion criteria were age under 50 years, cisgender heterosexual sexual orientation, presence of dementia or other mental illness, physical underdevelopment, illiteracy and/or blindness. The sample included 12.6% women and 87.4% men. The majority of respondents, 81.1%, identify as men, 12.6% as women, and the remaining gender identities were represented only individually (1.6% transgender women, 0.6% transgender men, 0.6% non-binary persons, 0.6% queer persons and 0.3% asexual persons). Gender fluid people were not represented. Regarding sexual orientation, the sample consists of 50.3% gay, 10.4% lesbian and 34.9% bisexual persons, while other sexual orientations represent 4.4%.

In terms of age structure, the group between the ages of 50 and 55 is predominant (50.9%), followed by the group between the ages of 56 and 60 (23.9%), which is followed by the group between the ages of 61 and 65 (13.5%), while the penultimate age group has an age range between 66 and 70 (8.5%). The group above 71 years of age (3.1%) includes the fewest persons.

We divided the sample into two age groups, specifically as a dichotomous variable with two categories – the younger generation of LGBTQ+ older adults consists of respondents in the age range between 50 and up to and including 60 years. The older generation of LGBTQ+ older adults, on the other hand, consists of LGBTQ+ older adults aged 61 or older. The older generation of LGBTQ+ older adults grew up in an era when social norms and legal protections for LGBTQ+ people differed significantly. These persons faced more severe stigmatisation and discrimination. The younger generation of LGBTQ+ older adults, however, grew up in an era when significant social and legal shifts in favour of LGBTQ+ rights began, but these shifts still partially influenced their youth and early adulthood.

Data collection process

The data was collected using a questionnaire in Slovenia, from 28th September 2023 to 8th November 2023. Hidden populations, such as LGBTQ+ older adults, are hard to reach and often stigmatised, which is why a social network-based snowball method was used to explore them and facilitate access to hidden populations [18]. In the research, we used paper and online surveys, since self-surveys ensure greater privacy and accuracy of answers, especially for sensitive topics [19]. We used online surveying, since computer-based surveying offers a greater sense of privacy and objectivity. The link to the survey was shared via social networks and in various bars and societies (mainly intended for the LGBTQ+ population), where surveys were also available in paper form. We collected a total of 318 completed surveys, 8 of which were in physical form. We ended the survey when we did not receive any new completed surveys for three consecutive days, which indicates the exhaustion of the snowball method.

Statistical data analysis

Exploratory factor analysis [1] was used to determine the structure between individual items (indicators), built on the basis of the method of principal components. To justify its use, we took into account the Kaiser-Meyer-Olkin measure of sampling adequacy ($KMO > 0.05$) [20] and the result of Bartlett's test of sphericity. The reliability of the considered measurement scale was measured with the Cronbach alpha coefficient [21]. We chose a value lower than 0.4 as the lower limit for a suitable utility value [21]. Factor weights determine the strength of the connection between an individual item and an individual factor, which means that we took into account individual items that are typically weighted on the associated factor (weights higher than 0.5) and that an individual item is not weighted on several different factors [22]. Means and standard deviation were calculated for each individual group separately among the descriptive statistics.

The assumption of normality of data distribution was checked with the Kolmogorov-Smirnov and Shapiro-Wilk tests. Both tests showed that none of the items of the mental health construct had normally distributed data ($p < 0.001$). The Mann-Whitney U test is used as a non-parametric alternative to the two-sample t-test. For example, Milenovich [23] recommends the Mann-Whitney U test for comparing two independent groups when the dependent variable is ordinal or continuous but not normally distributed. We therefore used the nonparametric Mann-Whitney U test to determine differences between the younger and older groups of LGBTQ+ older adults, which tests the null hypothesis for two samples from the same population. Statistical analysis was performed using SPSS version 27.

Ethical aspect of the research

The ethics commission at the Alma Mater Europaea University, Maribor, issued decision no. 15/2022-23, that the measurement instrument and the research are consistent with all ethical aspects of research work. The purpose of the commission is to protect the rights and dignity of all participants in the research process and to ensure that the research is carried out in accordance with applicable legislation and ethical guidelines.

RESULTS

Of the 8 items originally included, one item was removed during EFA processing due to a low communality value (below 0.4). The mental health factor thus includes the 7 items shown in Tab. 1., which also shows that all weights are above the value of 0.5. This indicates that all items significantly reflect the corresponding construct. Moreover, it ensures their discriminant and convergent validity.

■ Tab. 1. Factor weights and utilities for the mental health factor

Mental health factor	Communalities	Factor weights
I have frequent mood swings.	0.621	0.696
I have suffered from depression at least once in my life.	0.551	0.690
I often experience stress.	0.629	0.793
I worry about my age.	0.537	0.704
I try to maintain good mental function as I age.	0.521	0.701
The thought of getting old makes me anxious.	0.563	0.696
I have become more resilient due to facing many inequalities in society.	0.453	0.646
KMO: 0.714; Bartlett's test of sphericity: 477.866; sig. < 0.001		
Total percentage of explained variance: 64.4%		
Cronbach alpha coefficient: 0.652		

The KMO test has a value of 0.714, which indicates the suitability of the data for factor analysis, and the results of Bartlett's test of sphericity ($p < 0.001$) justify the use of factor analysis. The total percentage of explained variance is 64.359%, which means that the selected statements in this factor analysis explain a little more than three fifths

of the total variance in the responses. The value of the Cronbach alpha coefficient (0.652) indicates acceptable reliability.

Descriptive statistics (means, standard deviation) of the items of the mental health construct among younger and older generations of LGBTQ+ older adults are presented in Tab. 2. There were 238 younger LGBTQ+ older adults and 80 older LGBTQ+ older adults in the sample. As already mentioned, we determined with the Kolmogorov-Smirnov and Shapiro-Wilk tests that our results of the items of the mental health construct are not normally distributed ($p < 0.001$). Therefore, we used the non-parametric Mann Whitney U test. Statistically significant differences of the seven items of the mental health construct are shown in Tab. 3.

■ Tab. 2. Descriptive statistics on mental health among younger and older generations of LGBTQ+ older adults

	Younger group of LGBTQ+ older adults		Older group of LGBTQ+ older adults	
Sample size (N)	238		80	
Items	$\bar{X}$	σ	$\bar{X}$	σ
I have frequent mood swings.	3.46	1.750	3.47	1.535
I have suffered from depression at least once in my life.	3.70	2.373	3.33	2.165
I often experience stress.	4.02	1.961	3.09	1.869
I worry about my age.	2.97	1.777	3.19	2.013
I try to maintain good mental function as I age.	5.73	1.232	5.86	1.366
The thought of getting old makes me anxious.	3.28	1.705	3.09	1.827
I have become more resilient due to facing many inequalities in society.	4.58	1.671	3.99	1.864

Note: $\bar{X}$ – average value; σ – standard deviation

From the analysis of the results presented in Tab. 2, we find that the highest level of agreement between the younger and older generation of LGBTQ+ older adults is in regard to their critical thinking; specifically, that they try to maintain good mental health as they age. Below there is the confrontation with many inequalities in society, which made them more resilient. The data also show that the younger generation of LGBTQ+ older adults are more likely to experience stress than the older generation of LGBTQ+ older adults.

The lowest mean of agreement between the younger and older generations of LGBTQ+ older adults was misled by attributing their mental health problems largely to the environment's dismissive attitude toward the LGBTQ+ community.

Both groups exhibited the greatest standard deviation for the item *I have suffered from depression at least once in my life*. This may indicate greater heterogeneity in responses or greater individual diversity in experiences of depression among members of both groups. The younger group

of LGBTQ+ older adults exhibited the smallest standard deviation for the item *I have frequent mood swings*. In contrast, the group of older LGBTQ+ older adults demonstrated the least variability in responses to the item *I try to maintain good mental function as I age*.

■ Tab. 3. Differences in mental health between younger and older groups of LGBTQ+ older adults

	Mann-Whitney U	Asymp. Sig. (2-tailed)
I have frequent mood swings.	9296.000	0.836
I have suffered from depression at least once in my life.	8667.000	0.265
I often experience stress.	6909.500	0.001
I worry about my age.	8974.500	0.502
I try to maintain good mental function as I age.	8537.000	0.183
The thought of getting old makes me anxious.	8760.000	0.329
I have become more resilient due to facing many inequalities in society.	7801.000	0.019

The test of hypothesis H1 shows in the results of the analysis, which are given in Tab. 3, that there are no statistically significant differences in the five items ($p < 0.001$). There are two statistically significant differences ($p < 0.001$) between younger and older generations of LGBTQ+ older adults, specifically *I often experience stress* and *I have become more resilient due to facing many inequalities in society*. We therefore confirm hypothesis H1 on the basis of the results: there are statistically significant differences in the mental health of LGBTQ+ older adults between younger and older generations of LGBTQ+ older adults. The application of the new scale identified specific mental health challenges among LGBTQ+ older adults, thus, we also confirm hypothesis 2.

DISCUSSION

Using a newly validated measurement scale, we assessed the mental health of LGBTQ+ older adults in Slovenia. The results of EFA align with the existing literature, indicating that older LGBTQ+ individuals are exposed to numerous psychosocial stressors that can negatively impact their mental health. Our findings contribute to the existing body of knowledge by confirming that, even in the Slovenian context, stress, concerns about aging, and maintaining cognitive function are important aspects of mental health in this population. This study found significant statistical differences in mental health between younger and older generations of LGBTQ+ older adults, based on their experiences of stress and resilience related to coping with societal inequities.

It is typical for LGBTQ+ persons to often experience stress, loneliness and/or social exclusion due to society's attitude towards their sexual orientation and/or gender identity [8, 9]. The results of the conducted study show that LGBTQ+ older adults experience stress more often, which is more typical of the younger group of LGBTQ+ older adults. This is consistent with existing research

showing that LGBTQ+ people experience higher levels of minority stress due to stigmatisation, discrimination and social exclusion [9]. Minority stress can lead to an increased risk of mental disorders such as anxiety, depression and post-traumatic stress disorder [24, 25]. Stress can be further compounded by age discrimination (ageism) and lack of family support, especially for LGBTQ+ older adults [11].

Internalised homophobia is one of the stressors experienced by the LGBTQ+ population. With this term, we illustrate the orientation of an LGBTQ+ person towards society's anti-homosexual attitude towards themselves, which affects mental health, and especially the hardships of these people (well-being, self-esteem) [6]. Negative impact of heterosexist discrimination (avoidance or rejection of LGBTQ+ individuals by society due to belonging to a sexual minority) and internalised heterosexism (a negative attitude towards homosexuality and bisexuality and towards oneself as a gender person) on the mental health of the LGBTQ+ population [6].

Therefore, we conclude that the younger generation of LGBTQ+ older adults experiences stress more often, even though this generation has experienced less institutional discrimination since homosexuality in Slovenia. Nevertheless, they still face prejudice and discrimination in everyday life, e.g., in the workplace or in the health-care system [6], which has a detrimental effect on mental health [26], although this form of discrimination is less obvious compared to institutional discrimination. A further explanation for our finding is the greater awareness among the younger generation of LGBTQ+ older adults regarding various forms of discrimination, which can exacerbate feelings of stress and anxiety [6].

Below, we find that there is a statistically significant difference in the item *I have become more resilient due to facing many inequalities in society*. LGBTQ+ older adults who face societal inequities have developed higher levels of resilience, which is more characteristic of the younger generation of LGBTQ+ older adults. Resilience refers to an individual's ability to successfully overcome stressful events and challenges through everyday strategies that LGBTQ+ people use to deal with adversity in their lives [27].

This study's primary strength is its focus on understudied LGBTQ+ older adults in Slovenia. The quantitative design, purposive sampling, and EFA enhance its methodological rigor. The study's identification of specific mental health disparities contributes valuable insights into the unique experiences of LGBTQ+ older adults in Slovenia. The newly developed scale offers a valuable tool for measuring mental health within this population. The study's innovation lies in its nuanced understanding of the interplay between societal factors, individual experiences, and mental health outcomes, offering valuable guidance for policymakers and healthcare providers.

Research limitations

The primary limitation of this study is the sample size, although we achieved a relatively large number of participants. Conducting the research was challenging because it was extremely difficult to find representatives of the LGBTQ+ population among older adults because their

sexual orientations, gender identities, and gender expressions are still stigmatised and represent a taboo. We do not know this population well enough, nor do we have data on the proportion of LGBTQ+ people in the entire population, which alone makes planning a representative sample of respondents very challenging. An additional limitation is the snowball sampling based on social ties, which may result in the exclusion of individuals with less developed social networks or with privately oriented social networks. Another limitation of the research is the availability of specific gender identities within the LGBTQ+ acronym. We acknowledge the methodological limitations of this study. The low factor loading of the item *I have become more resilient due to facing many inequalities in society* suggests that it may be measuring resilience rather than mental health. This could be due to unclear item wording, social desirability bias, or sample heterogeneity. As a final limitation of the research, we point out that the inclusion criterion for participation was self-identification as part of the LGBTQ+ community. Some individuals, especially from rural settings, may have been reluctant to identify as part of the LGBTQ+ community due to stigma and therefore did not complete the survey.

CONCLUSIONS

The study proved significant statistical differences in mental health between younger and older generations of LGBTQ+ older adults, mostly with regard to their experience of stress and resilience in coping with societal inequities. The results show that the younger generation of LGBTQ+ older adults is more likely to experience stress, which is associated with greater exposure to minority stress, stigmatisation, discrimination, and social exclusion. These factors contribute to a higher risk of mental disorders such as anxiety, depression, etc. Because of all of the above, there is a need to increase understanding and acceptance of the LGBTQ+ community, with a particular focus on education about the challenges faced by LGBTQ+ older adults.

We further found that LGBTQ+ older adults, particularly the younger generation, developed higher levels of resilience. This resilience helps them overcome stressful events and challenges, which contributes to better coping with negative experiences and improving their mental health. Resilience is key to reducing the impact of stress and supporting well-being. Due to the existing evidence, it would be beneficial to develop new programmes aimed at supporting the mental health of the LGBTQ+ community by involving professionals who are trained to work with this population.

Nevertheless, the challenge of addressing the specific needs of LGBTQ+ older adults remains on multiple levels, as they still face prejudice and discrimination in their daily lives, which negatively impacts their mental health. It is important to take into account the complexity of their (gender) identities and experiences, especially as they are often members of several marginalised groups.

This research opens many possibilities for further research. It would be necessary to study the differences

in mental health between different generations within the LGBTQ+ community in order to determine how historical changes in social relations and rights affect different age groups.

Acknowledgements

We thank the DIH – Equal Under the Rainbow Association – for help with the survey.

ORCID

Mihael Nedeljko  <https://orcid.org/0000-0003-4484-8049>
Barbara Toplak Perović  <https://orcid.org/0000-0002-6013-0064>
Miran Grah  <https://orcid.org/0009-0008-7836-1689>
Boris Miha Kaučič  <https://orcid.org/0000-0002-9708-3214>

REFERENCES

1. United Nations Department of Economic and Social Affairs PD. World Population Ageing 2020 Highlights: Living arrangements of older persons 2020.
2. Emler CA. Social, economic, and health disparities among LGBT older adults. *Generations*. 2016;40(2):16-22.
3. Bloemen EM, Rosen T, LoFaso VM, et al. Lesbian, Gay, Bisexual, and Transgender Older Adults' Experiences With Elder Abuse and Neglect. *JAGS*. 2019;67(11):2338-2345.
4. Lagana L, Balian OA, Nakhla MZ, et al. A preliminary model of health regarding sexual and ethnic minority older adults. *CHS*. 2021;23(3):333-348.
5. Goldsen KF. Shifting social context in the lives of LGBTQ older adults. *Public Policy & Aging Report*. 2018;28(1):24-28.
6. Nourafshan AM. The new employment discrimination: Intra-LGBT intersectional invisibility and the marginalization of minority subclasses in antidiscrimination law. *Duke J. Gender L & Pol'y*. 2016;24:107.
7. Yarns BC, Abrams JM, Meeks TW, et al. The mental health of older LGBT adults. *Curr. Psychiatry Rep*. 2016;18:1-11.
8. Perone AK, Ingersoll-Dayton B, Watkins-Dukie K. Social isolation loneliness among LGBT older adults: Lessons learned from a pilot friendly caller program. *Clin. Soc. Work J*. 2020;48(1):126-139.
9. Mongelli F, Perrone D, Balducci J, et al. Minority stress and mental health among LGBT populations: An update on the evidence. *Minerva Psichiatr*. 2019;60(1):27-50.
10. McCann E, Sharek D, Higgins A, et al. Lesbian, gay, bisexual and transgender older people in Ireland: Mental health issues. *Aging Ment. Health*. 2013;17(3):358-65.
11. Fredriksen-Goldsen KI, Emler CA, Kim H-J, et al. The physical and mental health of lesbian, gay male, and bisexual (LGB) older adults: The role of key health indicators and risk and protective factors. *The Gerontologist*. 2013;53(4):664-675.
12. Jurček A, Urek M, Sobočan AM. Življenje LGBTQ+ starejših od 50 let v času epidemije covid-19. *Soc Delo J*. 2022;61(1).
13. Nedeljko M, Toplak-Perović B, Grah M, et al. Exploring Disparities in Life Satisfaction among LGBTQ+ Older Adults in different Living Environments: The Case of Slovenia. *Open Access Maced. J. Med. Sci*. 2024.
14. Jerala N, Petek D. Enhancing LGBT+ primary healthcare in Slovenia: A national qualitative study of experiences and expectations of LGBT+ people and family doctors. *EJGP*. 2024;30(1):2373121.
15. Peel E, Rivers I, Tyler A, et al. Exploring LGBT resilience and moving beyond a deficit-model: findings from a qualitative study in England. *Psychol. Sex.*. 2023;14(1):114-126.
16. Pachankis JE, Sullivan TJ, Feinstein BA, et al. Young adult gay and bisexual men's stigma experiences and mental health: An 8-year longitudinal study. *Dev. Psychol.*. 2018;54(7):1381.
17. Reker GT. Successful Aging Scale (SAS). Trent University. 2009:1-14.
18. Brečko BN. Istospolno usmerjeni: metodologija raziskovanja skritih populacij. *Družboslovne razprave*. 2005;21(49-50):107-118.
19. Tourangeau R, Smith TW. Asking sensitive questions: The impact of data collection mode, question format, and question context. *Public opinion quarterly*. 1996;60(2):275-304.
20. Kaiser HF. An index of factorial simplicity. *Psychometrika*. 1974;39(1):31-6.
21. Costello AB, Osborne J. Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical assessment, research, and evaluation*. 2019;10(1):7.
22. Hair JR, Anderson RE, Tatham RL, et al. *Multivariate Data Analysis*. Upper Saddle River, NJ: Prentice-Hall. Inc; 1998.
23. Milenović Ž. Application of Mann-Whitney U test in research of professional training of primary school teachers. *Metodički obzori: časopis za odgojno-obrazovnu teoriju i praksu*. 2011;6(11):73-79.
24. Wen J, Shi Y-k, Li Y-p, et al. Quality of life, physical diseases, and psychological impairment among survivors 3 years after Wenchuan earthquake: a population based survey. *PLoS one*. 2012;7(8):e43081-e.
25. Frost DM, Lehavot K, Meyer IH. Minority stress and physical health among sexual minority individuals. *J. Behav. Med*. 2015;38:1-8.
26. Gonzales G, Henning-Smith C. Health disparities by sexual orientation: Results and implications from the Behavioral Risk Factor Surveillance System. *J. Community Health*. 2017;42:1163-72.
27. Singh AA. Understanding trauma and supporting resilience with LGBT people of color. Trauma, resilience, and health promotion in LGBT patients: What every healthcare provider should know. Springer. 2017:113-9.

Manuscript received: 11.07.2024

Manuscript accepted: 09.10.2024